

**STATE OF UTAH**  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

FORM 3

AMENDED REPORT ☐  
(highlight changes)

<b>APPLICATION FOR PERMIT TO DRILL</b>		5. MINERAL LEASE NO: <b>ML-47777</b>	6. SURFACE: State
1A. TYPE OF WORK:    DRILL <input checked="" type="checkbox"/> REENTER <input type="checkbox"/> DEEPEN <input type="checkbox"/>		7. IF INDIAN, ALLOTTEE OR TRIBE NAME:	
B. TYPE OF WELL:    OIL <input type="checkbox"/> GAS <input checked="" type="checkbox"/> OTHER _____    SINGLE ZONE <input type="checkbox"/> MULTIPLE ZONE <input checked="" type="checkbox"/>		8. UNIT or CA AGREEMENT NAME:	
2. NAME OF OPERATOR: <b>The Houston Exploration Company</b>		9. WELL NAME and NUMBER: <b>North Walker Hollow 8-32-6-23</b>	
3. ADDRESS OF OPERATOR: <b>1100 Louisiana Suite 20</b> CITY <b>Houston</b> STATE <b>TX</b> ZIP <b>77002</b>		10. FIELD AND POOL, OR WILDCAT: <b>Undesignated</b>	
4. LOCATION OF WELL (FOOTAGES)  AT SURFACE: <b>1390' FNL &amp; 464' FEL</b> AT PROPOSED PRODUCING ZONE: <b>same as above</b>		11. QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: <b>SENE 32 T6S 23E</b>	
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE: <b>24.9 miles south of Vernal, UT</b>		12. COUNTY: <b>Uintah</b>	13. STATE: <b>UTAH</b>
15. DISTANCE TO NEAREST PROPERTY OR LEASE LINE (FEET) <b>464'</b>	16. NUMBER OF ACRES IN LEASE: <b>640</b>	17. NUMBER OF ACRES ASSIGNED TO THIS WELL: <b>40</b>	
18. DISTANCE TO NEAREST WELL (DRILLING, COMPLETED, OR APPLIED FOR) ON THIS LEASE (FEET) <b>1,700'</b>	19. PROPOSED DEPTH: <b>9,000</b>	20. BOND DESCRIPTION: <b>104155044</b>	
21. ELEVATIONS (SHOW WHETHER DF, RT, GR, ETC.): <b>4,958 GR</b>	22. APPROXIMATE DATE WORK WILL START: <b>11/15/2005</b>	23. ESTIMATED DURATION: <b>30 Days</b>	

**24. PROPOSED CASING AND CEMENTING PROGRAM**

SIZE OF HOLE	CASING SIZE, GRADE, AND WEIGHT PER FOOT	SETTING DEPTH	CEMENT TYPE, QUANTITY, YIELD, AND SLURRY WEIGHT
11"	8 5/8"    J-55    36#	2,000	PREMIUM LITE II    250 SKS    3.38 CF    11.0 PPG
			CLASS "G"    329 SKS    1.2 CF    15.6 PPG
			Calcium Chloride    200 SKS    1.10 CF    15.6 PPG
7 7/8"	4 1/2"    N-80    11.6#	9,000	PREMIUM LITE II    200 SKS    3.3 CF    11.0 PPG
			CLASS "G"    400 SKS    1.56 CF    14.3 PPG

**25. ATTACHMENTS**

VERIFY THE FOLLOWING ARE ATTACHED IN ACCORDANCE WITH THE UTAH OIL AND GAS CONSERVATION GENERAL RULES:

- |  |  |
|--|--|
| <input checked="" type="checkbox"/> WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER<br><input checked="" type="checkbox"/> EVIDENCE OF DIVISION OF WATER RIGHTS APPROVAL FOR USE OF WATER | <input checked="" type="checkbox"/> COMPLETE DRILLING PLAN<br><input type="checkbox"/> FORM 5, IF OPERATOR IS PERSON OR COMPANY OTHER THAN THE LEASE OWNER |
|--|--|

CONFIDENTIAL

NAME (PLEASE PRINT) William A. Ryan    TITLE Agent  
 SIGNATURE *William A. Ryan*    DATE 11-7-05

(This space for State use only)

API NUMBER ASSIGNED: 43-047-37401

**Approved by the  
Utah Division of  
Oil, Gas and Mining**

Date: 11-15-05  
 By: *[Signature]*  
 (See Instructions on Reverse Side)

RECEIVED  
NOV 17 2005  
DIV. OF OIL, GAS & MINING

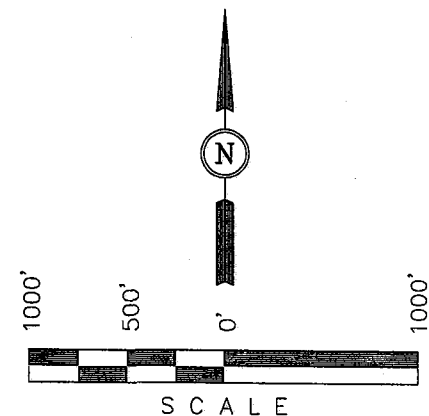
T6S, R23E, S.L.B.&M.

THE HOUSTON EXPLORATION COMPANY

Well location, NORTH WALKER HOLLOW  
#8-32-6-23, located as shown in the SE 1/4  
NE 1/4 of Section 32, T6S, R23E, S.L.B.&M.  
Uintah County, Utah.

### BASIS OF ELEVATION

SPOT ELEVATION AT THE SOUTHEAST CORNER OF SECTION  
32, T6S, R23E, S.L.B.&M. TAKEN FROM THE JENSEN  
QUADRANGLE, UTAH, UINTAH COUNTY, 7.5 MINUTE QUAD.  
(TOPOGRAPHIC MAP) PUBLISHED BY THE UNITED STATES  
DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID  
ELEVATION IS MARKED AS BEING 4959 FEET.



### CERTIFICATE

THIS IS TO CERTIFY THAT THE ABOVE DEED WAS PREPARED FROM  
FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY  
SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE  
BEST OF MY KNOWLEDGE AND BELIEF.

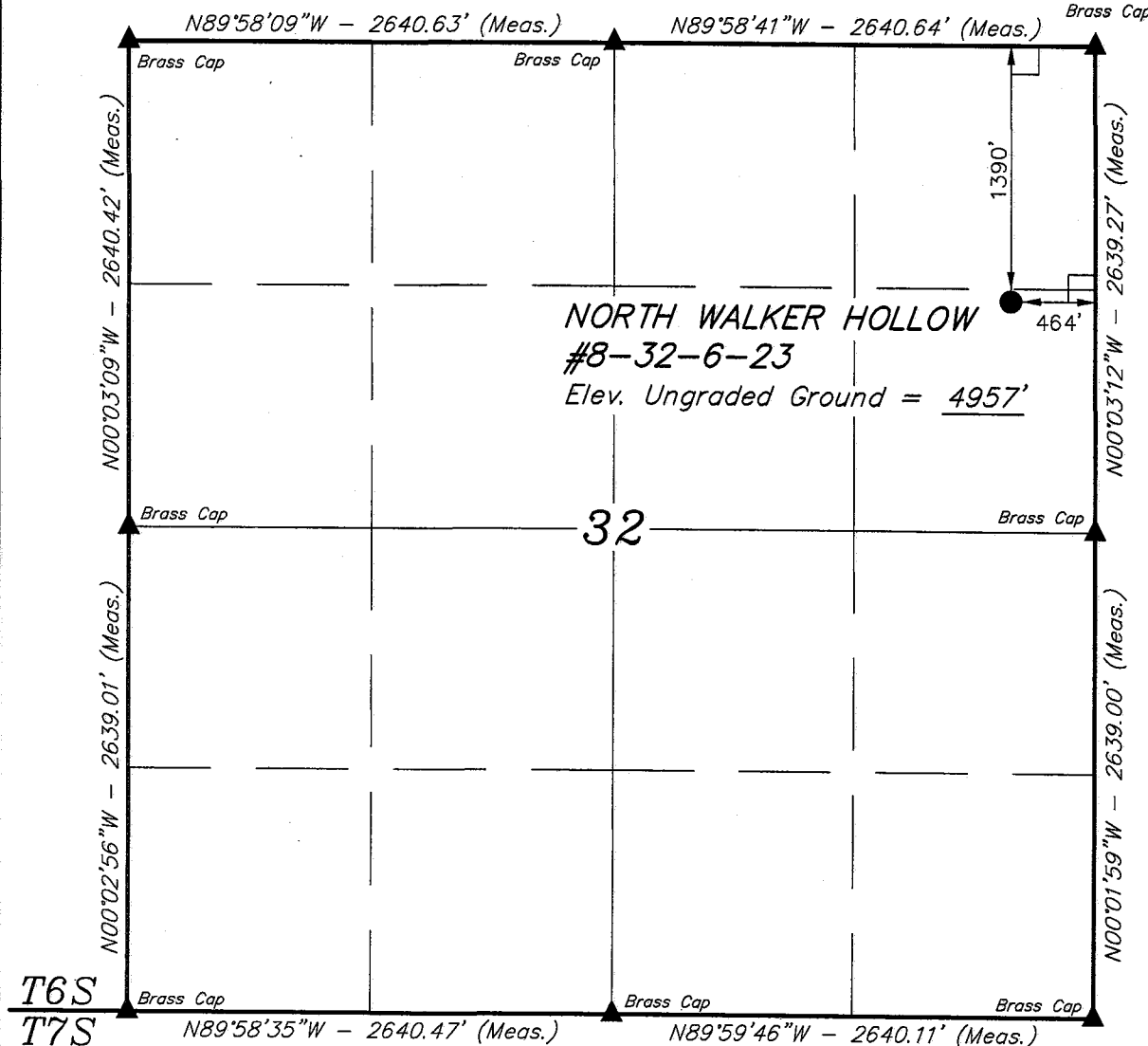
REGISTERED LAND SURVEYOR  
REGISTRATION NO. 16131  
STATE OF UTAH

UINTAH ENGINEERING & LAND SURVEYING

85 SOUTH 200 EAST - VERNAL, UTAH 84078

(435) 789-1017

SCALE 1" = 1000'	DATE SURVEYED: 07-20-05	DATE DRAWN: 07-25-05
PARTY N.H. D.S. P.M.	REFERENCES G.L.O. PLAT	
WEATHER HOT	FILE THE HOUSTON EXPLORATION COMPANY	



NORTH WALKER HOLLOW  
#8-32-6-23  
Elev. Ungraded Ground = 4957'

### BASIS OF BEARINGS

BASIS OF BEARINGS IS A G.P.S. OBSERVATION.

(AUTONOMOUS NAD 83)  
LATITUDE = 40°15'42.94" (40.261928)  
LONGITUDE = 109°20'48.11" (109.346697)  
(AUTONOMOUS NAD 27)  
LATITUDE = 40°15'43.07" (40.261964)  
LONGITUDE = 109°20'45.65" (109.356014)

### LEGEND:

- └─┘ = 90° SYMBOL
- = PROPOSED WELL HEAD.
- ▲ = SECTION CORNERS LOCATED.

## **Ten Point Plan**

### **The Houston Exploration Company**

#### **North Walker Hollow #8-32-6-23**

Surface Location SE ¼ NE ¼, Section 32, T. 6S., R. 23E.

#### **1. Surface Formation**

Green River

#### **2. Estimated Formation Tops and Datum:**

<u>Formation</u>	<u>Depth</u>	<u>Datum</u>
GR	Surface	4,958'
KB	+12'	4,970'
Green River	3,170'	+1,800'
Wasatch	6,170'	-1,200'
Mesaverda	8,670'	-3,700'TD

A 11" hole will be drilled to 2,000' +/- . The hole depth will depend on the depth that the Birds Nest Zone is encountered. The hole will be drilled 400' beyond the top of the Birds Nest.

#### **3. Producing Formation Depth:**

Formation objective includes the Green River, Wasatch, Mesaverde and its sub-members.

Off set well information

Permitted/Drilled:

North Walker Hollow #2-32-6-23  
North Walker Hollow #10-32-6-23  
North Walker Hollow #12-32-6-23  
North Walker Hollow #16-32-6-23

#### 4. Proposed Casing:

<u>Hole Size</u>	<u>Casing Size</u>	<u>Weight/FT</u>	<u>Grade</u>	<u>Coupling &amp; Tread</u>	<u>Casing Depth</u>	<u>New/Used</u>
11	8 5/8	36#	J-55	STC	2000	NEW
7 7/8	4 1/2	11.6#	N-80	LTC	T.D.	NEW

#### Cement Program:

The Surface Casing will be cemented to the Surface as follows:

	<u>Casing Size</u>	<u>Cement Type</u>	<u>Cement Amounts</u>	<u>Cement Yield</u>	<u>Cement Weight</u>
Lead:	8 5/8	Premium Lite II .05#/sk Static Free .25#/sk Cello Flake 5#/sk KOL Seal .002 gps FP-6L 10% Bentonite .5% Sodium Metasilicate 3% Potassium Chloride	250 sks. +/-	3.38ft <sup>3</sup> /sk	11.0 ppg
Tail:	8 5/8	Class "G" 2% Calcium Chloride .25#/sk Cello Flake	329 sks. +/-	1.2ft <sup>3</sup> /sk	15.6 ppg
Top Job:	8 5/8	4% Calcium Chloride .25#/sk Cello Flake	200 sks. +/-	1.10ft <sup>3</sup> /sk	15.6 ppg

Production casing will be cemented to 2,500' or higher as follows:

	<u>Casing Size</u>	<u>Cement Type</u>	<u>Cement Amounts</u>	<u>Cement Yield</u>	<u>Cement Weight</u>
Lead:	4 1/2	Premium Lite II .25#/sk Cello Flake .05#/sk Static Free 5#/sk Kol Seal 3% Potassium Chloride .055 gps FP-6L 10% Bentonite .5 Sodium Metasilicate	200 sks +/-	3.3ft <sup>3</sup> /sk	11.0 ppg
Tail:	4 1/2	Class "G" .05% Static Free 2 Sodium Chloride .1% R-3 2% Bentonite	400 sks +/-	1.56ft <sup>3</sup> /sk	14.3 ppg

##### **5. BOP and Pressure Containment Data:**

The anticipated bottom hole pressure will be less than 3000 psi.

A 3000-psi WP BOP system as described in the BOP and Pressure Containment Data (attached) will be installed and maintained from the 8 5/8" surface casing. The BOP system including the casing will be pressure tested to minimum standards set forth in "On Shore Order #2". The BOP will be mechanically checked daily during the drilling operation.

## 6. Mud Program:

<u>Interval</u>	<u>Mud weight lbs./gal.</u>	<u>Viscosity Sec./OT.</u>	<u>Fluid Loss Ml/30 Mins.</u>	<u>Mud Type</u>
0-2000	Air/Clear Water	-----	No Control	Water/Gel
2000-T.D.	8.4-12.0	30	8-10	Water/Gel

## 7. Auxiliary Equipment

Upper Kelly cock, full opening stabbing valve, 2 1/2" choke manifold and pit level indicator.

## 8. Testing, Coring, Sampling and Logging:

- a) Test: None are anticipated.
- b) Coring: There is the possibility of sidewall coring.
- c) Sampling: Every 10' from 2000' to T.D.
- d) Logging: 

Type	Interval
DLL/SFL W/GR and SP	T.D. to Surf. Csg
FDC/CNL W/GR and CAL	T.D. to Surf. Csg

## 9. Abnormalities (including sour gas):

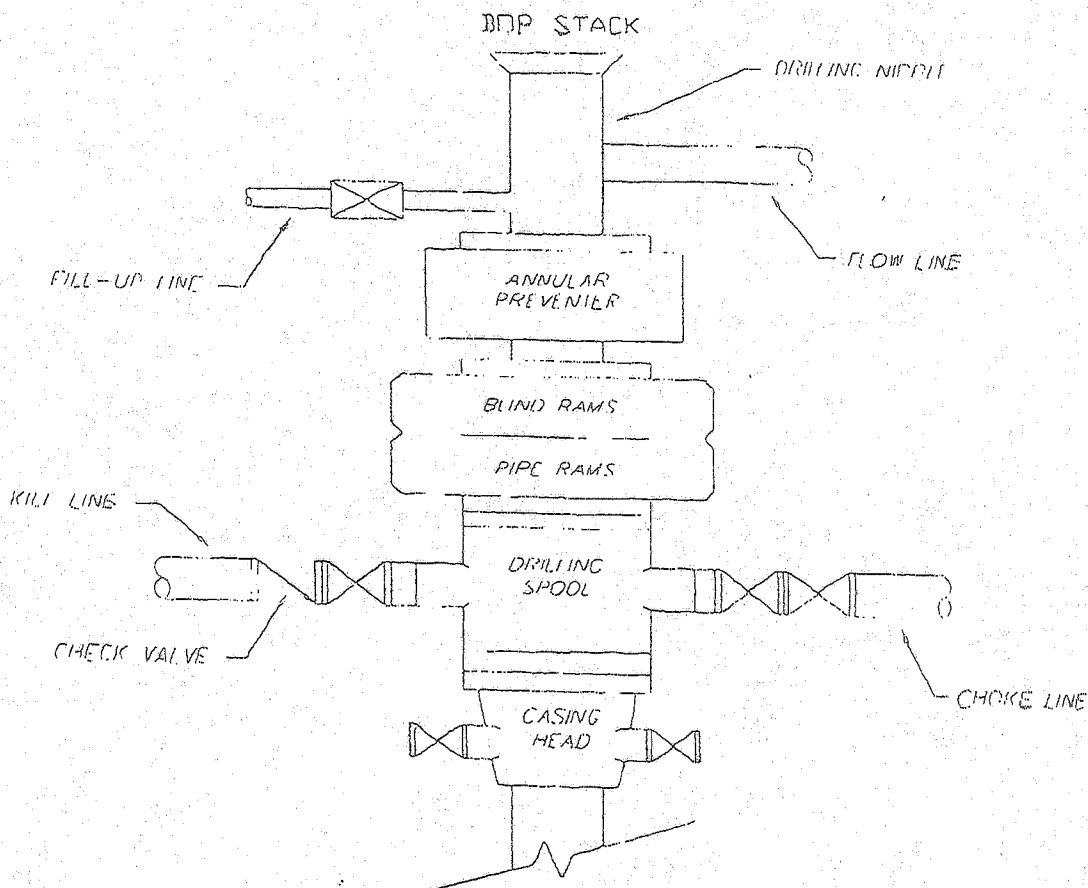
No abnormal pressures, temperatures or other hazards are anticipated. Oil and gas shows are anticipated in the Wasatch Formation. Other wells drilled in the area have not encountered over pressured zones or H<sub>2</sub>S.

## 10. Drilling Schedule:

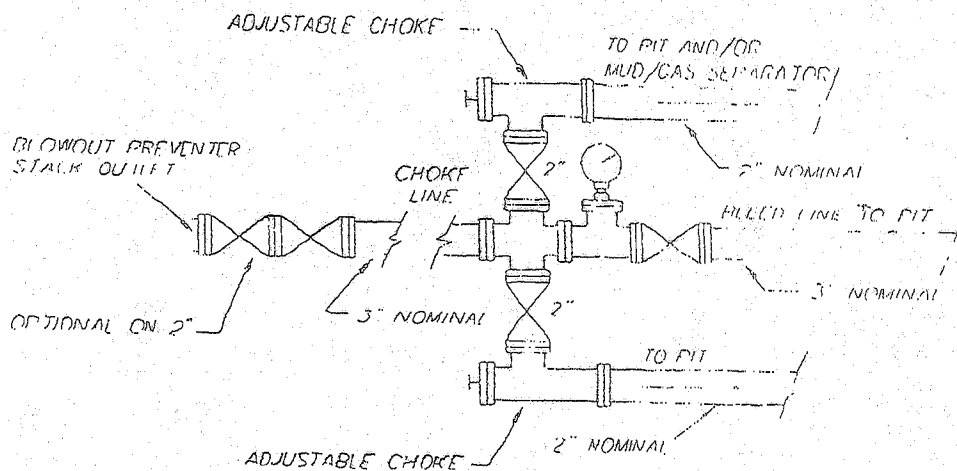
The anticipated starting date is 1/1 /2005. Duration of operations is expected to be 30 days.

# THE HOUSTON EXPLORATION COMPANY

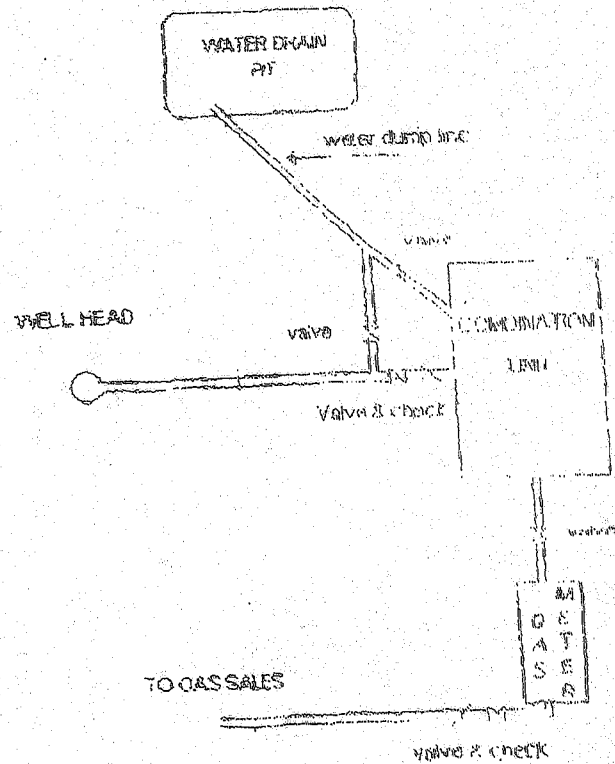
## TYPICAL 3,000 p.s.i. BLOWOUT PREVENTER SCHEMATIC



## TYPICAL 3,000 p.s.i. CHOKE MANIFOLD SCHEMATIC



TYPICAL  
C&S WELL





**THE HOUSTON EXPLORATION COMPANY**

**13 POINT SURFACE USE PLAN**

**FOR WELL**

**North Walker Hollow #8-32-6-23**

**LOCATED IN SE  $\frac{1}{4}$  NE  $\frac{1}{4}$**

**SECTION 32, T.6S, R23E, S.L.B.&M.**

**UINTAH COUNTY, UTAH**

**LEASE NUMBER: ML-47777**

**SURFACE OWNERSHIP: STATE**

1. Existing Roads:

To reach The Houston Exploration Co. well North Walker Hollow 8-32-6-23 Section 32, T6S, R 23E, Starting in Vernal, Utah.

Proceed in an easterly direction from Vernal, Utah along U.S. Highway 40 approximately 13.7 miles to the junction of this road and an existing road to the south; turn right and proceed in a southerly, then southwesterly, then southeasterly direction approximately 8.4 miles to the junction of this road and an existing road to the southeast; turn left and proceed in a southeasterly direction approximately 2.5 miles to the beginning of the proposed access for the NWH #2-32-6-23 to the northeast; follow road flags in a northeasterly direction approximately 75' to the beginning of the proposed access to the northeast; follow road flags in a northeasterly, then southeasterly direction approximately 0.3 miles to the proposed location.

Total distance from Vernal, Utah to the proposed well location is approximately 24.9 miles.

All existing roads to the proposed location are State of Utah, BLM maintained or County Class D roads. Please see the attached map for additional details.

2. Planned access road

The proposed access road will be approximately 1,584' +/- of new

construction on lease. The road will be graded once per year minimum and maintained.

- A) Approximate length 1,584 ft
- B) Right of Way width 30 ft
- C) Running surface 18 ft
- D) Surface material Native soil
- E) Maximum grade 5%
- F) Fence crossing None
- G) Culvert None
- H) Turnouts None
- I) Major cuts and fills None
- J) Road Flagged Yes
- K) Access road surface ownership State
- L) All new construction on lease Yes
- M) Pipe line crossing None

Please see the attached location plat for additional details.

An off lease right-of-way will not be required.

All surface disturbances for the road and location will be within the lease boundary.

3. Location of existing wells

The following wells are located within a one-mile radius of the location site.

- A) Producing well None
- B) Water well None
- C) Abandoned well None
- D) Temp. abandoned well None
- E) Disposal well None
- F) Drilling /Permitted well
  - North Walker Hollow 2-32-6-23
  - North Walker Hollow 10-32-6-23
  - North Walker Hollow 12-32-6-23
  - North Walker Hollow 16-32-6-23
- G) Shut in wells None
- H) Injection well None

**I) Monitoring or observation well**

**None**

Please see the attached map for additional details.

4. Location of tank batteries, production facilities and production gathering service lines.

All production facilities are to be contained within the proposed location site. Please see the attached plat plan for a typical gas well separator installation and well site piping.

All permanent (on site for more than six months or longer) structures constructed or installed will be painted an **Carlsbad Canyon** color. Facilities required to comply with O.S.H.A. (Occupational Safety and Health Act) will be excluded. The required paint color is **Carlsbad Canyon**.

All tanks will be surrounded by a dike of sufficient capacity to contain the storage capacity of the largest tank in the battery. The integrity of the dike will be maintained.

The operator will adhere to all site security guidelines and regulation identified in 43 cfr 3126.7.

All off lease storage, off lease measurement, commingling on lease or off lease, of production, will have prior written approval from the authorized officer.

If the well is capable of economic production a surface gas line will be required.

**Approximately 1,584' +/- of 3" steel surface gas gathering line would be constructed on State Lands. The line will tie into the proposed pipeline in Section 32, T6S, R23E. The pipeline would be strung and boomed to the northeast of the location and follow access roads. The pipeline may be buried as determined by the Authorized Officer at the onsite.**

**An off lease right-of-way will not be required.**

**Please see the attached location diagrams for pipeline location.**

The gas meter run will be located within 500' of the wellhead. The gas line will be buried or anchored down from the wellhead to the meter. Meter runs will be housed and/or fenced.

The gas meter will be calibrated and the tank strapped in place prior to any deliveries. Tests for meter accuracy will be conducted monthly for the first three months on new meter installations and at least quarterly thereafter. The authorized officer will be provided with a date and time for the initial meter calibration and all future meter-proving schedules. A copy of the meter calibration report will be submitted to the BLM's Vernal District office and State of Utah, Division of Oil, Gas, and Mining. All measurement facilities will conform to API (American Petroleum Institute) and AGA (American Gas Association)

standards for gas and liquid hydrocarbon measurement.

5. Location and type of water supply

**Water for drilling and cementing will come from The Green River in Permit # T-76073.**

6. Source of construction materials

All construction material for this location site and access road shall be borrow material accumulated during construction of the location site and access road. Additional road gravel or pit lining material will be obtained from private resources.

7. Methods for handling waste disposal

A) Pit construction and liners:

The reserve pit will be approximately **12 ft.** deep and most of the depth shall be below the surface of the existing ground. Please see the attached plat for details.

The reserve pit will be lined.

The reserve pit will be used to store water for drilling. A semi-closed system will be used to drill the well. All fresh water for drilling will come from a frac tank placed on location and from the rig tank. The pit will be used to hold non-flammable materials such as cuttings, salt, drilling fluids, chemicals, produced fluids, etc.

B) Produced fluids:

Produced water will be confined to the reserve pit, or if deemed necessary, a storage tank for a period not to exceed 90 days after initial production. During the 90-day period an application for approval for permanent disposal method and location will be submitted to the authorized officer. **Evaporation may be used instead of trucking to facilitate closing and reclamation of the reserve pit. A pumping system would be used for evaporation.**

C) Garbage:

A trash cage fabricated from expanded metal will be used to hold trash on location and will be removed to an authorized landfill location.

D) Sewage:

A portable chemical toilet will be supplied for human waste.

E) Site clean-up:

After the rig is moved off the location the well site area will be cleaned and all refuse removed.

8. Ancillary facilities

There are no ancillary facilities planned at this time and none are foreseen for the future.

9. Well-site layout

Location dimensions are as follows:

- A) Pad length 345 ft.
- B) Pad width 245 ft.
- C) Pit depth 12 ft.
- D) Pit length 150 ft.
- E) Pit width 75 ft.
- F) Max cut 15.2ft.
- G) Max fill 6.2 ft.
- H) Total cut yds. 8,080 cu yds
- I) Pit location South side
- J) Top soil location Northeast end
- K) Access road location North end
- L) Flare Pit corner C

Please see the attached location diagram for additional details.

All pits will be fenced according to the following minimum standards:

- A) Thirty nine inch net wire shall be used with at least one strand of wire on top of the net wire. Barbed wire is not necessary if pipe or some type of reinforcement rod is attached to the top of the entire fence.
- B) The net wire shall be no more than 2 inches above the ground. The barbed wire shall be 3 inches above the net wire. Total height of the fence shall be at least 42 inches.
- C) Corner posts shall be cemented and/or braced in such a manner to keep the fence tight at all times.

D) Standard steel, wood or pipe posts shall be used between the corner braces. Maximum distance between any two posts shall be no greater than 16 ft.

E) All wire shall be stretched by using a stretching device before it is attached to the corner posts.

10. Plans for restoration of the surface

Prior to construction of the location, the top 6 inches of soil material will be stripped off the location and the pit area. The topsoil removed and piled will amount to approximately 1,670 cubic yards of material.

Topsoil will be stockpiled in one distinct pile. Placement of the topsoil is noted on the attached location plat. The topsoil pile from the location will be seeded as soon as the soil is stock piled with the seed mix listed. When all drilling and completion activities have been completed and the pit back-filled the topsoil from the pit area will be spread on the pit area. The pit area will be seeded when the soil has been spread. The unused portion of the location (the area outside the dead men) will be re-contoured.

The dirt contractor will be provided with an approved copy of the surface use plan prior to construction activities.

Changes to the drainage during the construction activities shall be restored to its original line of flow or as near as possible when the pit is back-filled

All disturbed areas will be re-contoured to the approximate natural contours. Prior to back filling the pit the fences around the reserve pit will be removed.

The reserve pit will be reclaimed within 90 days of well completion. If the reserve pit has not dried sufficiently to allow back filling, an extension on the time requirement for back filling the pit will be requested. Once reclamation activities have begun, they shall be completed within 30 days.

After the reserve pit has been reclaimed, no depressions in the soil covering the reserve pit will be allowed. The objective is to keep seasonal rainfall and run off from seeping into the soil used to cover the reserve pit. Diversion ditches and water bars will be used to divert the run off as needed.

When restoration activities have been completed, the location site and new access road cuts and shoulders shall be reseeded. Prior to reseeding, all disturbed areas will be scarified and left with a rough surface.

A) Seeding dates:

Seed will be spread when topsoil is stock piled and when reclamation work is performed.

The seed mix and quantity list will be used whether the seed is broadcast or drilled.

B) Seed Mix

**To be determined by the  
Authorized Officer.**

11. Surface ownership:

<b>Access road</b>	<b>State</b>
<b>Location</b>	<b>State</b>
<b>Pipe line</b>	<b>State</b>

12. Other information:

A) Vegetation

The vegetation coverage is Slight. The majority of the existing vegetation consists of non-native species. Rabbit brush, bitter brush, and Indian Rice grass and Sagebrush are also found on the location.

B) Dwellings:

There are no dwelling or other facilities within a one-mile radius of the location.

C) Archeology:

The location has been surveyed. A copy of that survey will be forwarded to your office.

If, during operations, any archaeological or historical sites, or any objects of antiquity (subject to the antiquities act of June 8, 1906) are discovered, all operations, which would affect such sites, will be suspended and the discovery reported

promptly to the surface  
management agency.

been off production for  
more than 90 days.

D) Water:

**The nearest water is the  
Green River located 5 miles  
to the Northwest.**

E) Chemicals:

No pesticides, herbicides or  
other possible hazardous  
chemicals will be used without  
prior application.

F) Notification:

- a) Location Construction  
At least forty eight (48)  
hours prior to  
construction of location  
and access roads.
- b) Location completion  
Prior to moving on the  
drilling rig.
- c) Spud notice  
At least twenty-four (24)  
hours prior to spudding  
the well.
- d) Casing string and  
cementing  
At least twenty-four (24)  
hours prior to running  
casing and cementing all  
casing strings.
- e) BOP and related  
equipment tests  
At least twenty-four (24)  
hours prior to initial  
pressure tests.
- f) First production notice  
Within five (5) business  
days after the new well  
begins, or production  
resumes after well has

G) Flare pit:

The flare pit will be located in  
**corner C** of the reserve pit out  
side the pit fences and 100 feet  
from the bore hole on the east  
side of the location. All fluids  
will be removed from the pit  
within 48 hours of occurrence.

13. Lessees or Operator's representative  
and certification

A) Representative

William A. Ryan  
Rocky Mountain Consulting  
290 S 800 E  
Vernal, UT 84078

Office 435-789-0968  
Fax 435-789-0970  
Cellular 435-828-0968

All lease and/or unit operations  
will be conducted in such a  
manner that full compliance is  
made with all applicable laws,  
regulations, onshore oil and gas  
orders, and any applicable  
notices to lessees. The operator  
is fully responsible for the  
actions of his subcontractors. A  
copy of these conditions will be  
furnished to the field  
representative to ensure  
compliance.

This drilling permit will be  
valid for a period of one year  
from the date of approval.  
After permit termination, a new

application will be filed for approval for any future operations.

**B) Certification:**

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill-site and access route that I am familiar with the conditions which presently exist, that the statements made in this plan are, to the best of my knowledge and belief, true and correct, and that the work associated with the operation proposed herein will be preformed by The Houston Exploration Company and its contractors and subcontractors in conformity with this plan and terms and conditions with this plan and the terms and conditions under which it is approved.

Date 11-14-06



William A. Ryan, Agent  
Rocky Mountain Consulting

**Onsite Dates:**



### Statement of use of Hazardous Materials

No chemical(s) from the EPA's consolidated list of Chemicals subject to Reporting under Title III of the Superfund Amendments and Reauthorization, Act (SARA) of 1986 will be used, produced, transported, stored, disposed, or associated with the proposed action. No extremely hazardous substances, as defined in 40 cfr 355, will be used, produced, stored, transported, disposed, or associated with the proposed action.

If you require additional information please contact:

William A Ryan  
Agent for The Houston Exploration Company  
Rocky Mountain Consulting  
290 S 800 E  
Vernal, UT 84078

435-789-0968 Office  
435-828-0968 Cell  
435-789-0970 Fax

**THE HOUSTON EXPLORATION COMPANY**  
**NORTH WALKER HOLLOW #8-32-6-23**  
LOCATED IN UINTAH COUNTY, UTAH  
SECTION 32, T6S, R23E, S.L.B.&M.



PHOTO: VIEW FROM CORNER #5 TO LOCATION STAKE

CAMERA ANGLE: NORTHEASTERLY



PHOTO: VIEW FROM BEGINNING OF PROPOSED ACCESS

CAMERA ANGLE: NORTHEASTERLY



**UELS** Uintah Engineering & Land Surveying  
85 South 200 East Vernal, Utah 84078  
435-789-1017 uels@uelsinc.com

**LOCATION PHOTOS**

**07 28 05**  
MONTH DAY YEAR

**PHOTO**

TAKEN BY: N.H.

DRAWN BY: P.M.

REVISED: 00-00-00

# THE HOUSTON EXPLORATION COMPANY

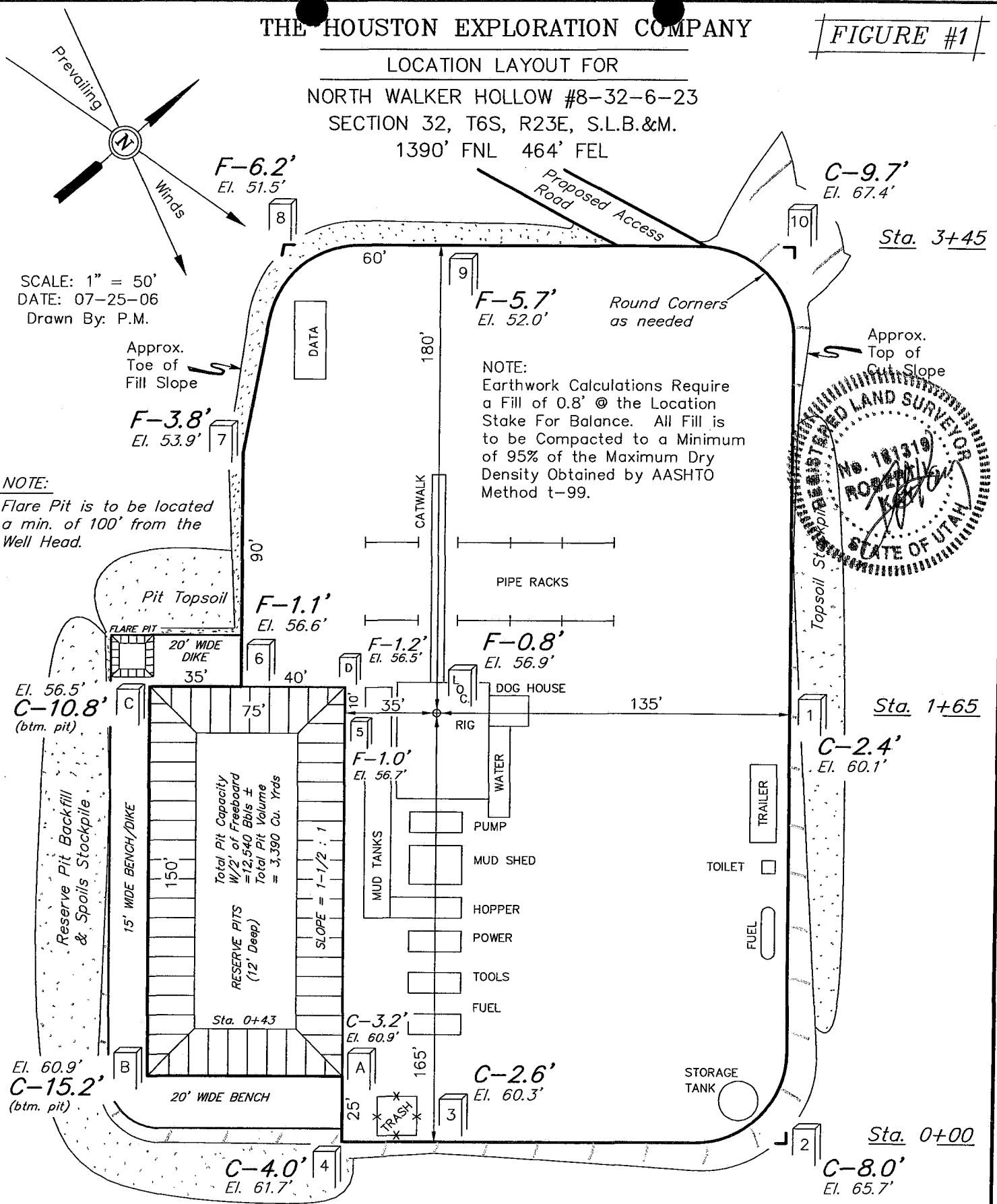
FIGURE #1

## LOCATION LAYOUT FOR

NORTH WALKER HOLLOW #8-32-6-23

SECTION 32, T6S, R23E, S.L.B.&M.

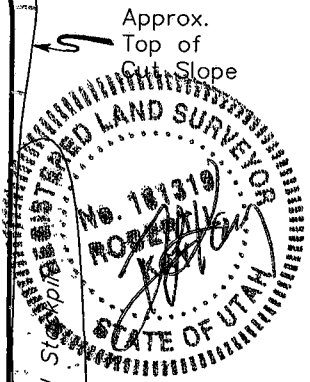
1390' FNL 464' FEL



SCALE: 1" = 50'  
DATE: 07-25-06  
Drawn By: P.M.

NOTE:  
Flare Pit is to be located  
a min. of 100' from the  
Well Head.

NOTE:  
Earthwork Calculations Require  
a Fill of 0.8' @ the Location  
Stake For Balance. All Fill is  
to be Compacted to a Minimum  
of 95% of the Maximum Dry  
Density Obtained by AASHTO  
Method t-99.



### NOTES:

Elev. Ungraded Ground At Loc. Stake = 4956.9'

FINISHED GRADE ELEV. AT LOC. STAKE = 4957.7'

UINTAH ENGINEERING & LAND SURVEYING  
85 So. 200 East \* Vernal, Utah 84078 \* (435) 789-1017

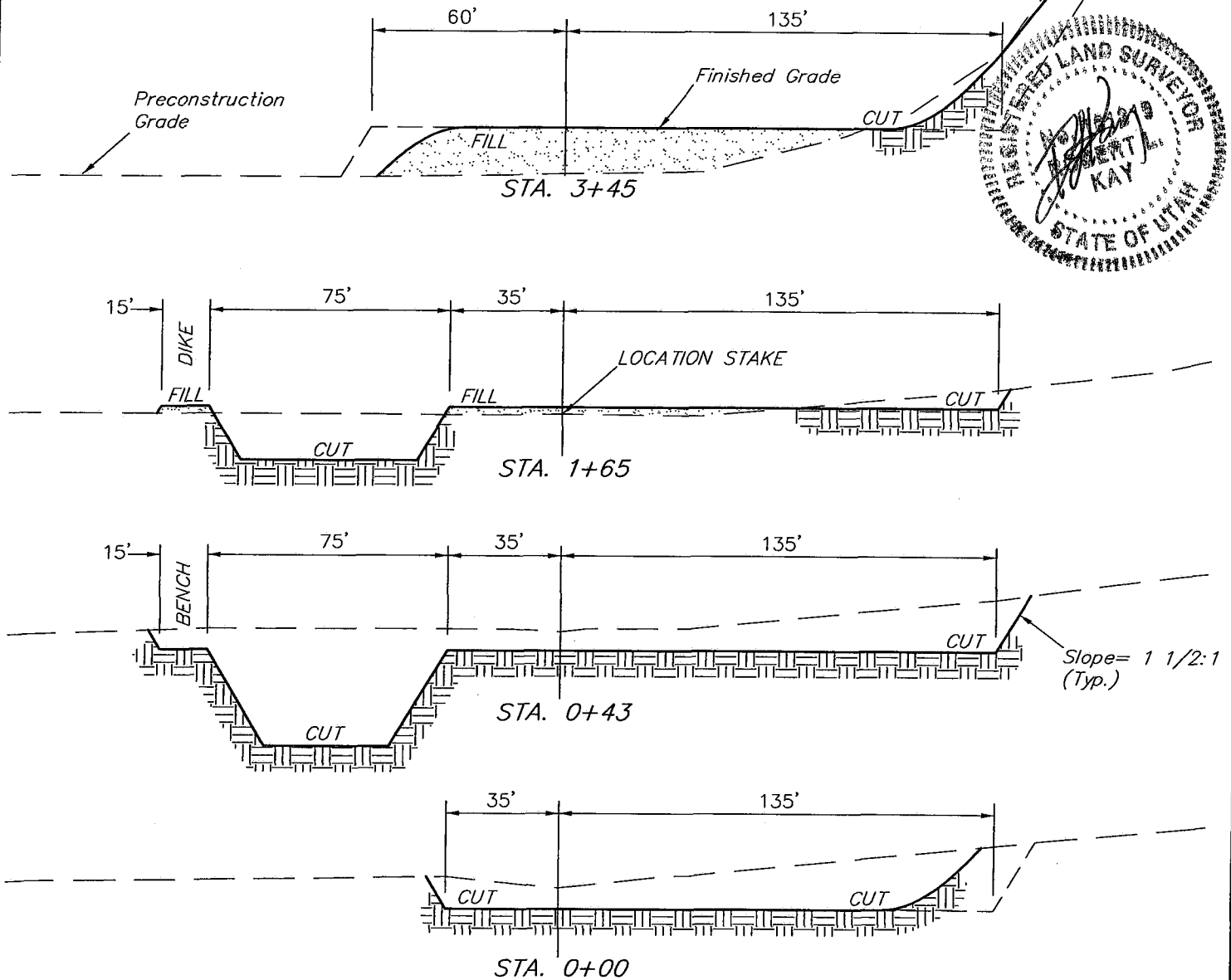
# THE HOUSTON EXPLORATION COMPANY

FIGURE #2

TYPICAL CROSS SECTIONS FOR  
NORTH WALKER HOLLOW #8-32-6-23  
SECTION 32, T6S, R23E, S.L.B.&M.  
1390' FNL 464' FEL

1" = 20'  
X-Section  
Scale  
1" = 50'

DATE: 07-25-06  
Drawn By: P.M.



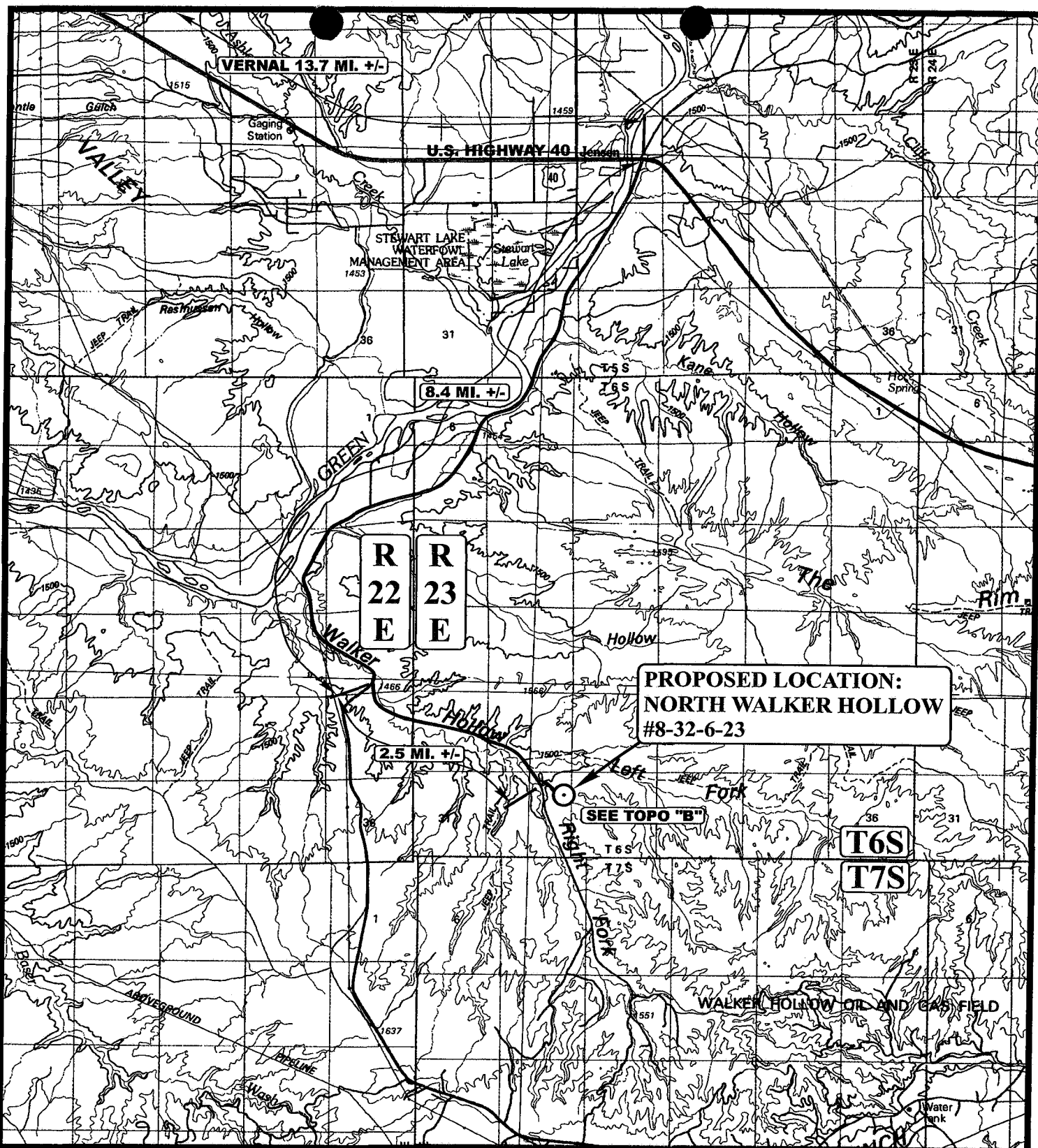
\* NOTE:  
FILL QUANTITY INCLUDES  
5% FOR COMPACTION

## APPROXIMATE YARDAGES

CUT  
(6") Topsoil Stripping = 1,670 Cu. Yds.  
Remaining Location = 6,410 Cu. Yds.  
  
TOTAL CUT = 8,080 CU.YDS.  
FILL = 4,710 CU.YDS.

EXCESS MATERIAL = 3,370 Cu. Yds.  
Topsoil & Pit Backfill = 3,370 Cu. Yds.  
(1/2 Pit Vol.)  
EXCESS UNBALANCE = 0 Cu. Yds.  
(After Rehabilitation)

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# LEGEND:

○ PROPOSED LOCATION

## THE HOUSTON EXPLORATION COMPANY

NORTH WALKER HOLLOW #8-32-6-23  
SECTION 32, T6S, R23E, S.L.B.&M.  
1390' FNL 464' FEL



Uintah Engineering & Land Surveying  
85 South 200 East Vernal, Utah 84078  
(435) 789-1017 \* FAX (435) 789-1813



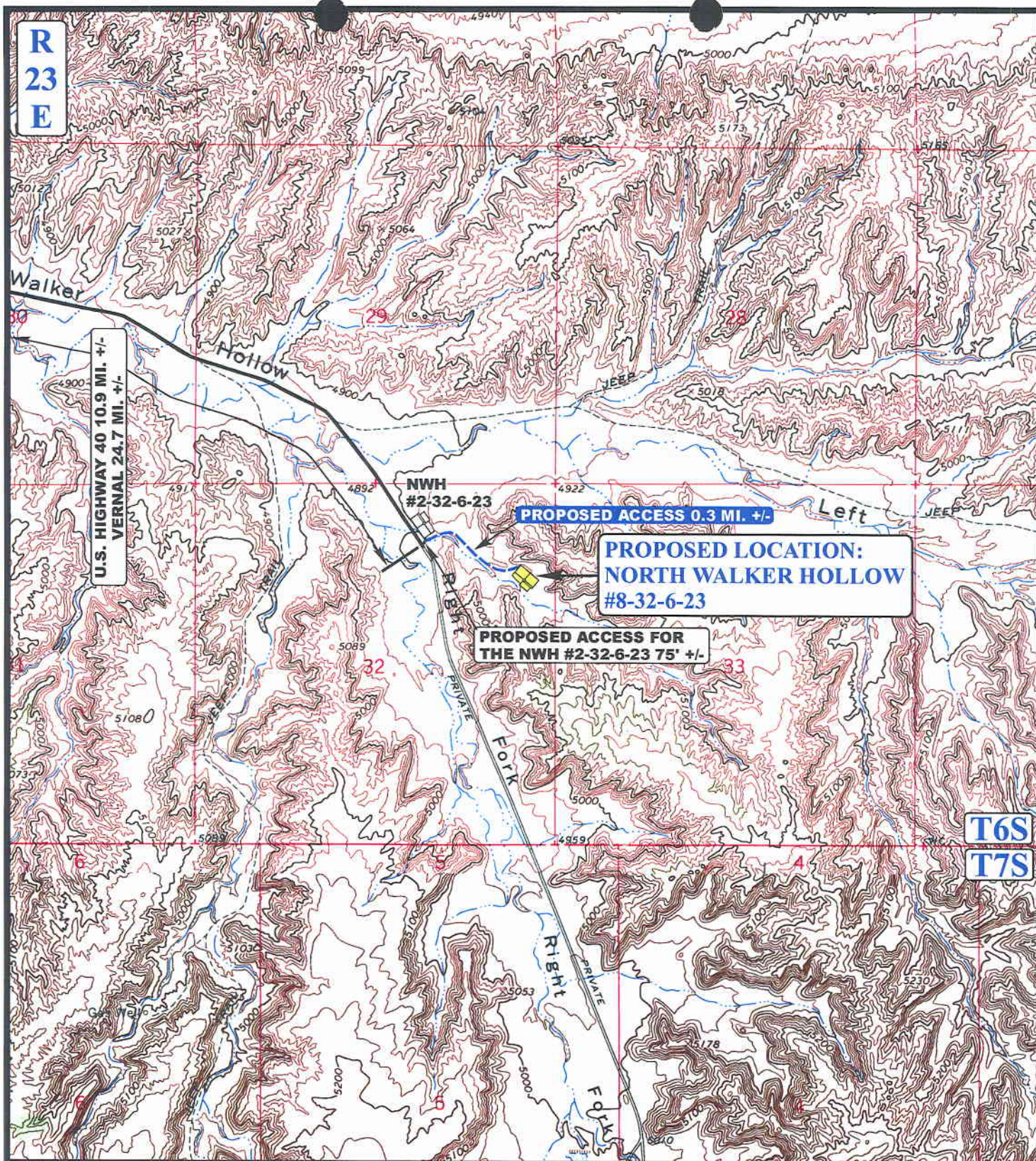
TOPOGRAPHIC  
MAP

07 28 05  
MONTH DAY YEAR

SCALE: 1:100,000 DRAWN BY: P.M. REVISED: 00-00-00







# LEGEND:

EXISTING ROAD  
 PROPOSED ACCESS ROAD



## THE HOUSTON EXPLORATION COMPANY

**NORTH WALKER HOLLOW #8-32-6-23**  
**SECTION 32, T6S, R23E, S.L.B.&M.**  
**1390' FNL 464' FEL**



**Uintah Engineering & Land Surveying**  
 85 South 200 East Vernal, Utah 84078  
 (435) 789-1017 \* FAX (435) 789-1813

**TOPOGRAPHIC**  
**MAP**

**07** **28** **05**  
 MONTH DAY YEAR

SCALE: 1" = 2000' DRAWN BY: P.M. REVISED: 00-00-00

**B**  
**TOPO**



R  
23  
E

Walker

Hollow

PROPOSED LOCATION:  
NORTH WALKER HOLLOW  
#8-32-6-23

Left

Right  
PRIVATE  
Folk

Right  
PRIVATE  
Folk

T6S

T7S

**LEGEND:**

- |                   |                         |
|-------------------|-------------------------|
| ○ DISPOSAL WELLS  | ○ WATER WELLS           |
| ● PRODUCING WELLS | ● ABANDONED WELLS       |
| ● SHUT IN WELLS   | ● TEMPORARILY ABANDONED |



**THE HOUSTON EXPLORATION COMPANY**

**NORTH WALKER HOLLOW #8-32-6-23**

**SECTION 32, T6S, R23E, S.L.B.&M.**

**1390' FNL 464' FEL**



**Uintah Engineering & Land Surveying**  
85 South 200 East Vernal, Utah 84078  
(435) 789-1017 \* FAX (435) 789-1813

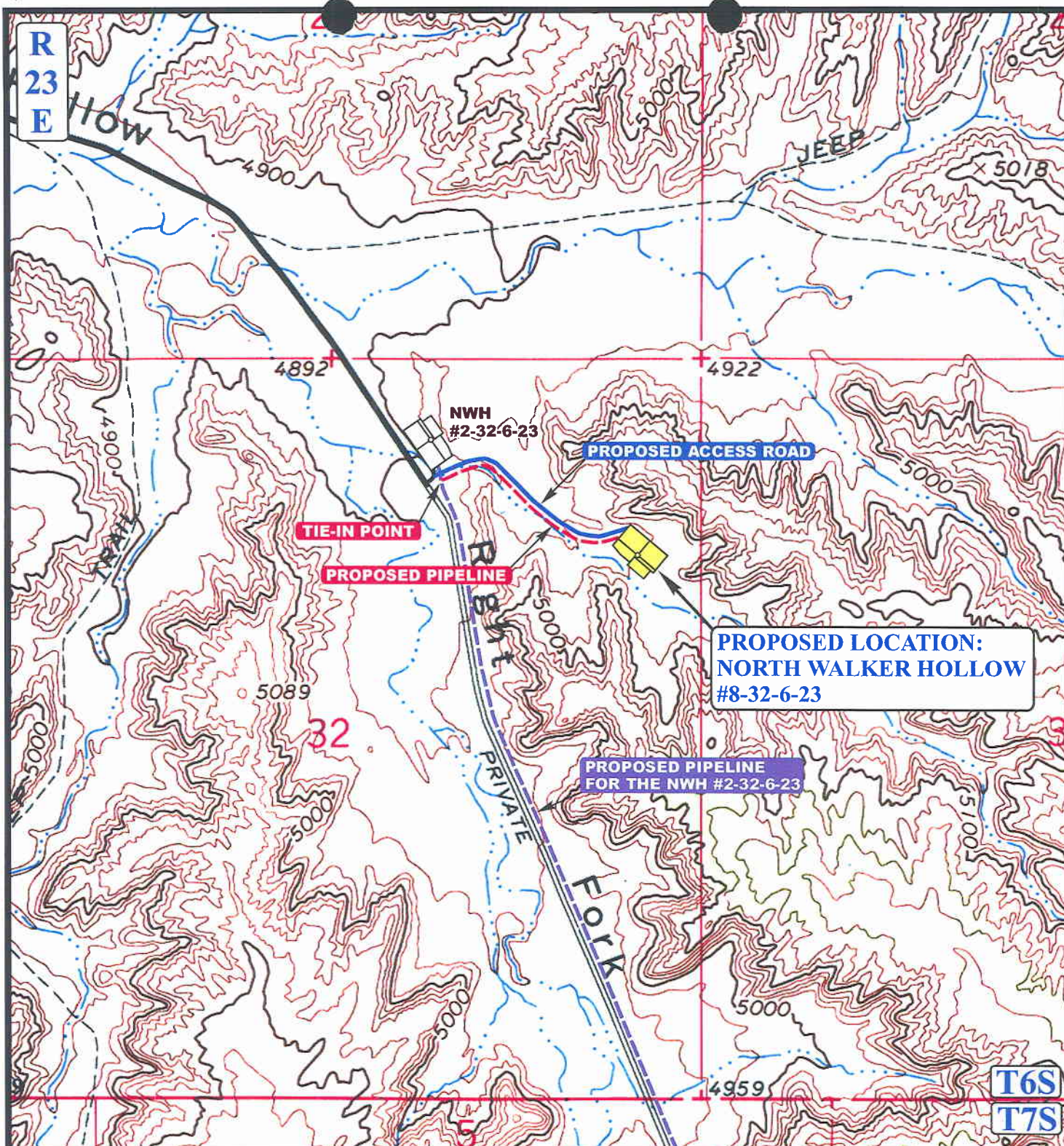
**TOPOGRAPHIC  
MAP**

**07 28 05**  
MONTH DAY YEAR

SCALE: 1" = 2000' DRAWN BY: P.M. REVISED: 00-00-00







**APPROXIMATE TOTAL PIPELINE DISTANCE = 1,550' +/-**

**LEGEND:**

- PROPOSED ACCESS ROAD
- EXISTING PIPELINE
- - - - PROPOSED PIPELINE
- - - - PROPOSED PIPELINE (SERVICING OTHER WELLS)



**Uintah Engineering & Land Surveying**  
 85 South 200 East Vernal, Utah 84078  
 (435) 789-1017 \* FAX (435) 789-1813



**THE HOUSTON EXPLORATION COMPANY**

**NORTH WALKER HOLLOW #8-32-6-23**  
**SECTION 32, T6S, R23E, S.L.B.&M.**  
**1390' FNL 464' FEL**

**TOPOGRAPHIC**  
**MAP**

**07 28 05**  
 MONTH DAY YEAR

SCALE: 1" = 1000' DRAWN BY: P.M. REVISED: 00-00-00

**D**  
**TOPO**



WORKSHEET  
APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 11/17/2005

API NO. ASSIGNED: 43-047-37401

WELL NAME: N WALKER HOLLOW 8-32-6-23

OPERATOR: HOUSTON EXPLORATION CO, ( N2525 )

CONTACT: BILL RYAN

PHONE NUMBER: 435-789-0968

PROPOSED LOCATION:

SENE 32 060S 230E

SURFACE: 1390 FNL 0464 FEL

BOTTOM: 1390 FNL 0464 FEL

UINTAH

UNDESIGNATED ( 2 )

LEASE TYPE: 3 - State

LEASE NUMBER: ML-47777

SURFACE OWNER: 3 - State

PROPOSED FORMATION: MVRD

COALBED METHANE WELL? NO

INSPECT LOCATN BY: / /

Tech Review	Initials	Date
Engineering	DKD	1/20/06
Geology		
Surface		

LATITUDE: 40.26192

LONGITUDE: -109.3461

RECEIVED AND/OR REVIEWED:

☒ Plat  
☒ Bond: Fed[] Ind[] Sta[] Fee[]  
(No. 104155044)  
☒ Potash (Y/N)  
☒ Oil Shale 190-5 (B) or 190-3 or 190-13  
☒ Water Permit  
(No. T-76073)  
☒ RDCC Review (Y/N)  
(Date: \_\_\_\_\_)  
☒ Fee Surf Agreement (Y/N)  
☒ Intent to Commingle (Y/N)

LOCATION AND SITING:

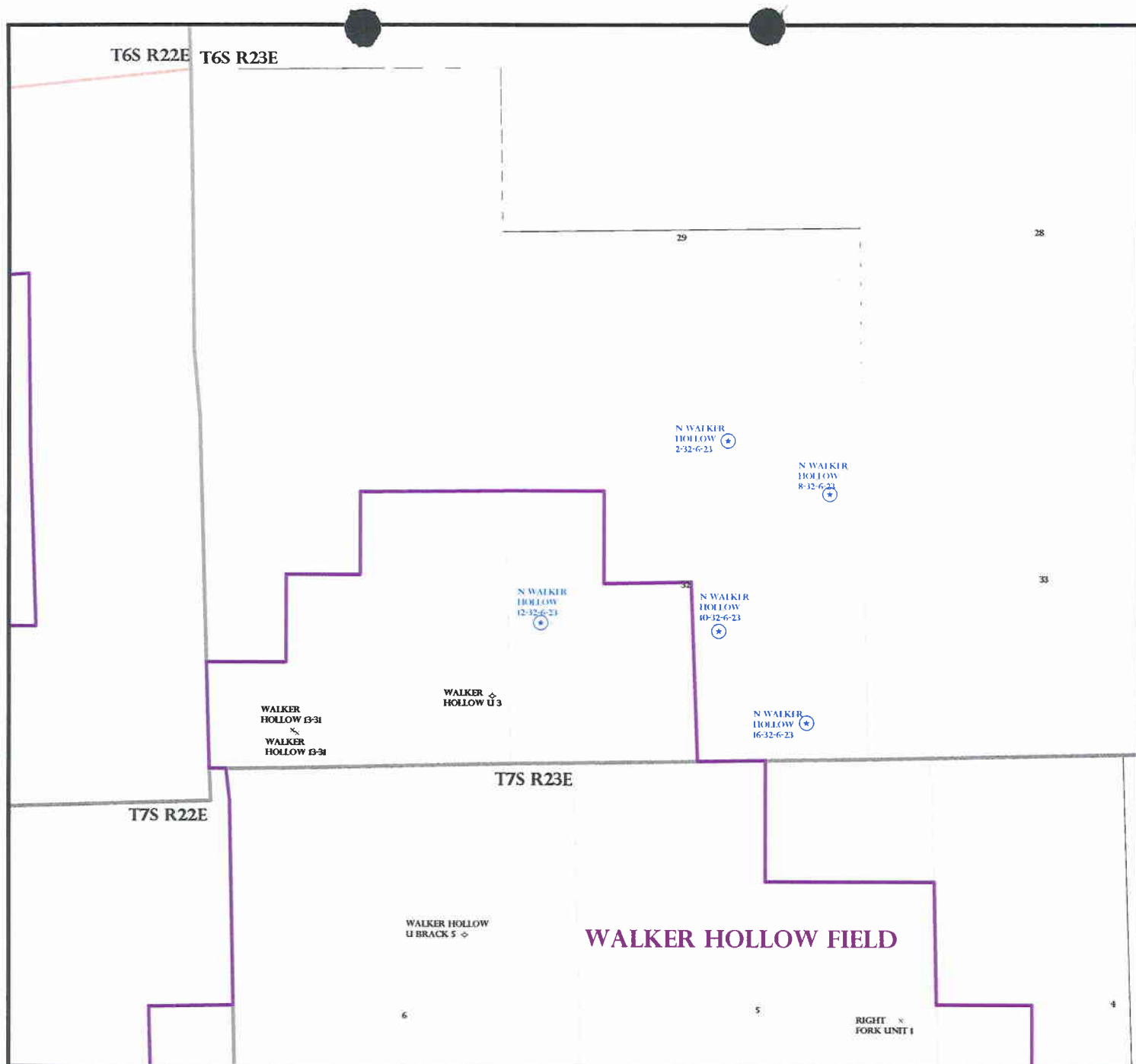
\_\_\_\_ R649-2-3.  
Unit \_\_\_\_\_  
\_\_\_\_ R649-3-2. General  
Siting: 460 From Qtr/Qtr & 920' Between Wells  
☒ R649-3-3. Exception  
\_\_\_\_ Drilling Unit  
Board Cause No: \_\_\_\_\_  
Eff Date: \_\_\_\_\_  
Siting: \_\_\_\_\_  
\_\_\_\_ R649-3-11. Directional Drill

COMMENTS:

Needs Permit (11-29-05)

STIPULATIONS:

1- Spacing Strip  
2- STATEMENT OF BASIS



OPERATOR: THE HOUSTON EXPL CO (N2525)

SEC: 32 T. 6S R. 23E

FIELD: UNDESIGNATED (002)

COUNTY: UINTAH

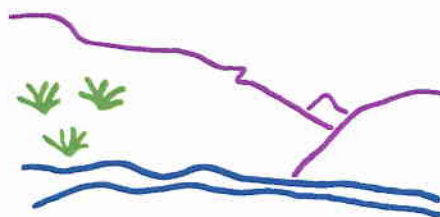
SPACING: R649-3-3 / EXCEPTION LOCATION

**Field Status**  
 ABANDONED  
 ACTIVE  
 COMBINED  
 INACTIVE  
 PROPOSED  
 STORAGE  
 TERMINATED

**Unit Status**  
 EXPLORATORY  
 GAS STORAGE  
 NF PP OIL  
 NF SECONDARY  
 PENDING  
 PI OIL  
 PP GAS  
 PP GEOTHERML  
 PP OIL  
 SECONDARY  
 TERMINATED

#### Wells Status

GAS INJECTION  
 GAS STORAGE  
 LOCATION ABANDONED  
 NEW LOCATION  
 PLUGGED & ABANDONED  
 PRODUCING GAS  
 PRODUCING OIL  
 SHUT-IN GAS  
 SHUT-IN OIL  
 TEMP. ABANDONED  
 TEST WELL  
 WATER INJECTION  
 WATER SUPPLY  
 WATER DISPOSAL  
 DRILLING



Utah Oil Gas and Mining



PREPARED BY: DIANA WHITNEY  
 DATE: 18-NOVEMBER-2005

**DIVISION OF OIL, GAS AND MINING  
APPLICATION FOR PERMIT TO DRILL  
STATEMENT OF BASIS**

**OPERATOR:** THE HOUSTON EXPLORATION COMPANY  
**WELL NAME & NUMBER:** NORTH WALKER HOLLOW 8-32-6-23  
**API NUMBER:** 43-047-37401  
**LOCATION:** 1/4,1/4 SE/NE sec: 32 TWP: 6S RNG: 23E 1390 FNL 464 FEL

**Geology/Ground Water:**

The Houston Ex. Co. proposes to set 2000 feet of surface casing cemented to the surface. The base of the moderately saline water is estimated at 4,950 feet. A search of Division of Water Rights records shows one water well within a 10,000 foot radius of the center of Section 32. This well is approximately 1.5 miles SE of the center of Section 2. The well produces water from a depth of 27 feet and is owned by the BLM. The surface formation at this location is the Uinta Formation. The Uinta Formation is made up of discontinuous sands interbedded with shales and are not expected to produce prolific aquifers. The proposed surface casing should adequately protect any near surface aquifers.

**Reviewer:** Brad Hill **Date:** 12-05-05

**Surface:**

The predrill investigation of the surface was performed on 11/29/05. Ben Williams with UDWR and Jim Davis with SITLA were invited to this investigation by email on 11/22/05. Both were present.

Mr. Williams representing the UDWR stated the area is classified as high value yearlong habitat for antelope and limited value yearlong habitat for deer. Also, an old but possibly active prairie dog colony is partially within the proposed location. He did not recommend any restriction periods or actions to the Operator or SITLA for these species. He stated no other wildlife species are expected to be significantly affected. Mr. Williams also gave Ms. Stringham and Mr. Davis a UDWR recommended seed mix to be used when reserve pit and location are reclaimed.

This site is on State surface, with State minerals, and appears to be the best site for a location in the immediate area.

**Reviewer:** Floyd Bartlett **Date:** 11/30/05

**Conditions of Approval/Application for Permit to Drill:**

1. A synthetic liner with a minimum thickness of 16 mils and a felt subliner shall be properly installed and maintained in the reserve pit.

**ON-SITE PREDRILL EVALUATION**  
**Division of Oil, Gas and Mining**

OPERATOR: THE HOUSTON EXPLORATION COMPANY

WELL NAME & NUMBER: NORTH WALKER HOLLOW 8-32-6-23

API NUMBER: 43-047-37401

LEASE: ML-47777 FIELD/UNIT: UNDESIGNATED

LOCATION: 1/4, 1/4 SE/NE sec: 32 TWP: 6S RNG: 23E 1390 FNL 464 FEL

LEGAL WELL SITING: 460 F SEC. LINE; 460 F 1/4, 1/4 LINE; 920 F ANOTHER WELL.

GPS COORD (UTM): 640647 E 4457929 N SURFACE OWNER: STATE OF UTAH

**PARTICIPANTS**

Floyd Bartlett (DOGM), Ginger Stringham (HOUSTON), Ben Williams (UDWR)  
Corey Stubbs (Stubbs & Stubbs Construction), Jim Davis, (SITLA).

**REGIONAL/LOCAL SETTING & TOPOGRAPHY**

Walker Hollow is located approximately 26 miles southeast of Vernal, UT. It is an ephemeral drainage, which flows northwest into the Green River. General topography characterizing the Walker Hollow area is broad gentle sloping valleys or swales, separated by somewhat low hills or ridges. Ridges or hills frequently have exposed sandstone near the top occasionally forming cliffs. The valleys show sign of seasonal runoff in shallow meandering drainages. Drainages generally are not incised. Access is by paved state and county and graveled county roads.

The proposed North Walker Hollow 8-32-6-23 gas well lies in a small gentle side draw of the Right Fork of Walker Hollow. Topography is essentially level with a slight slope to the northwest. Access will be from existing roads except for approximately 1550 feet of new road to be constructed.

**SURFACE USE PLAN**

CURRENT SURFACE USE: wildlife, winter cattle grazing and hunting.

PROPOSED SURFACE DISTURBANCE: 1,550 feet of new access road and construction of a well location 345'x 200' plus reserve pit and soil stockpile storage outside the described area.

LOCATION OF EXISTING WELLS WITHIN A 1 MILE RADIUS: See attached 'TOPO C' map from GIS database.

LOCATION OF PRODUCTION FACILITIES AND PIPELINES: All production facilities will be on location and added after drilling well. Pipeline will follow the edge of the access road approximately 1,550 feet to a tie-in point with a pipeline to the proposed NWH 2-32-6-23 well.

SOURCE OF CONSTRUCTION MATERIAL: All construction material will be borrowed from site during construction of location.

ANCILLARY FACILITIES: None will be required.

WILL DRILLING AT THIS LOCATION GENERATE PUBLIC INTEREST OR CONCERNS?  
EXPLAIN: Unlikely. Oilfield activity is common in the area and is the dominant use.

#### WASTE MANAGEMENT PLAN:

Drilled cuttings will be settled into reserve pit. Liquids from pit will be allowed to evaporate. Formation water will be confined to storage tanks. Commercial contractor will handle sewage facilities, storage and disposal. Trash will be contained in trash baskets and hauled to an approved land fill.

#### ENVIRONMENTAL PARAMETERS

AFFECTED FLOODPLAINS AND/OR WETLANDS: None.

FLORA/FAUNA: Vegetation is dominated by cheat grass. Russian thistle and annual mustard also exists.

Dominant fauna is pronghorn, rodents, prairie dogs, songbirds, raptors, deer, bobcat, coyote.

SOIL TYPE AND CHARACTERISTICS: Deep light brown sandy loam with no surface rock.

EROSION/SEDIMENTATION/STABILITY: No stability problems are anticipated with the construction and operation of the location. One dry stream low water crossing will be necessary to reach the location.

PALEONTOLOGICAL POTENTIAL: none sited.

#### RESERVE PIT

CHARACTERISTICS: 150' by 75' and 12' deep. The reserve pit is planned in an area of cut. No stabilization problems are expected.

LINER REQUIREMENTS (Site Ranking Form attached): A liner will be required for reserve pit. Sensitivity score of 25, rating as Level I, Highly Sensitive. Operator routinely installs a 16 mil. liner in all reserve pits.

#### SURFACE RESTORATION/RECLAMATION PLAN

AS PER SITLA.

SURFACE AGREEMENT: AS PER SITLA.

CULTURAL RESOURCES/ARCHAEOLOGY: Site was inspected by Sagebrush Archeological Consultants on 11/4/2005. A report of this investigation will be placed on file.

#### OTHER OBSERVATIONS/COMMENTS

An fence line runs along the Right Fork of Walker Road. It will be crossed to reach the location. This fence was brought to the attention of Jim Davis representing SITLA. He stated a cattle guard will be

required and will be included in the Surface Agreement that SITLA will issue.

Ben Williams representing the UDWR stated the area is classified as high value yearlong habitat for antelope and limited value yearlong habitat for deer. Also a old but possibly active prairie dog colony is partially within the proposed location. He did not recommend any restrictions to the Operator or SITLA.

ATTACHMENTS

Photos of site have been taken and placed on file.

Floyd Bartlett  
DOGM REPRESENTATIVE

11/29/2005 09:15 AM  
DATE/TIME

**Evaluation Ranking Criteria and Ranking Score  
For Reserve and Onsite Pit Liner Requirements**

<u>Site-Specific Factors</u>	<u>Ranking</u>	<u>Site Ranking</u>
Distance to Groundwater (feet)		
>200	0	
100 to 200	5	
75 to 100	10	
25 to 75	15	<u>0</u>
<25 or recharge area	20	
Distance to Surf. Water (feet)		
>1000	0	
300 to 1000	2	
200 to 300	10	
100 to 200	15	
< 100	20	<u>0</u>
Distance to Nearest Municipal Well (feet)		
>5280	0	
1320 to 5280	5	
500 to 1320	10	
<500	20	<u>0</u>
Distance to Other Wells (feet)		
>1320	0	
300 to 1320	10	
<300	20	<u>0</u>
Native Soil Type		
Low permeability	0	
Mod. permeability	10	
High permeability	20	<u>20</u>
Fluid Type		
Air/mist	0	
Fresh Water	5	
TDS >5000 and <10000	10	
TDS >10000 or Oil Base Mud Fluid	15	
containing significant levels of hazardous constituents	20	<u>5</u>
Drill Cuttings		
Normal Rock	0	
Salt or detrimental	10	<u>0</u>
Annual Precipitation (inches)		
<10	0	
10 to 20	5	
>20	10	<u>0</u>
Affected Populations		
<10	0	
10 to 30	6	
30 to 50	8	
>50	10	<u>0</u>
Presence of Nearby Utility Conduits		
Not Present	0	
Unknown	10	
Present	15	<u>0</u>

**Final Score**      25      (Level I Sensitivity)

Sensitivity Level I = 20 or more; total containment is required.

Sensitivity Level II = 15-19; lining is discretionary.

Sensitivity Level III = below 15; no specific lining is required.







Casing Schematic

Uinta

Surface

8-5/8"  
MW 8.4  
Frac 19.3

TOC @  
0.

1220  
Toe Tail

✓ w/18% Washout

Surface  
2000. MD

BHP

$$(.052)(9)(9000) = 4212$$

Anticipate  $\pm 3000$

Gas

$$(.12)(9000) = 1080$$

MASP = 3132

Fluid

$$(.22)(9000) = 1980$$

MASP = 2232

BOPE - 3,000 ✓

Surf Csg - 4460

70% = 3122

Max pressure @ Surf Shoe = ~~2672~~ 2672

Test to 2600# ✓

✓ Adequate prod 1/20/06

4-1/2"  
MW 9.

TOC @  
3068.

3170 Green River

✓ propose TOC  $\pm 2500'$

4950 Bmsal

6170 Wasatch

6564 Toe Tail

w/15% Washout

✓ TOC 2475' w/11% Washout

8670 Mesaverde

Production  
9000. MD

Well name:

**01-06 Houston N Walker Hollow 8-32-6-23**Operator: **Houston Exploration Company**String type: **Surface**

Project ID:

**43-047-37401**Location: **Uintah County****Design parameters:****Collapse**Mud weight: 8.400 ppg  
Design is based on evacuated pipe.**Minimum design factors:****Collapse:**

Design factor 1.125

**Burst:**

Design factor 1.00

**Environment:**H2S considered? No  
Surface temperature: 65 °F  
Bottom hole temperature: 93 °F  
Temperature gradient: 1.40 °F/100ft  
Minimum section length: 250 ft

Cement top: 0 ft

**Burst**Max anticipated surface  
pressure: 1,760 psi  
Internal gradient: 0.120 psi/ft  
Calculated BHP 2,000 psi

No backup mud specified.

**Tension:**8 Round STC: 1.80 (J)  
8 Round LTC: 1.80 (J)  
Buttress: 1.60 (J)  
Premium: 1.50 (J)  
Body yield: 1.50 (B)Tension is based on buoyed weight.  
Neutral point: 1,749 ft

Non-directional string.

**Re subsequent strings:**Next setting depth: 9,000 ft  
Next mud weight: 9.000 ppg  
Next setting BHP: 4,208 psi  
Fracture mud wt: 19.250 ppg  
Fracture depth: 2,000 ft  
Injection pressure 2,000 psi

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Internal Capacity (ft³)
1	2000	8.625	36.00	J-55	ST&C	2000	2000	7.7	143.6
Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (Kips)	Tension Strength (Kips)	Tension Design Factor
1	873	3450	3.953	2000	4460	2.23	63	434	6.89 J

Prepared Clinton Dworshak  
by: Utah Div. of Oil & MiningPhone: 801-538-5280  
FAX: 810-359-3940Date: January 18, 2006  
Salt Lake City, Utah

## Remarks:

Collapse is based on a vertical depth of 2000 ft, a mud weight of 8.4 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop &amp; Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

*Engineering responsibility for use of this design will be that of the purchaser.*

Well name:	<b>01-06 Houston N Walker Hollow 8-32-6-23</b>	
Operator:	<b>Houston Exploration Company</b>	Project ID:
String type:	<b>Production</b>	<b>43-047-37401</b>
Location:	<b>Uintah County</b>	

**Design parameters:**
**Collapse**

Mud weight: 9.000 ppg  
Design is based on evacuated pipe.

**Minimum design factors:**
**Collapse:**

Design factor 1.125

**Burst:**

Design factor 1.00

**Environment:**

H2S considered? No  
Surface temperature: 65 °F  
Bottom hole temperature: 191 °F  
Temperature gradient: 1.40 °F/100ft  
Minimum section length: 1,500 ft

Cement top: 3,068 ft

**Burst**

Max anticipated surface pressure: 1,760 psi  
Internal gradient: 0.272 psi/ft  
Calculated BHP 4,208 psi

No backup mud specified.

**Tension:**

8 Round STC: 1.80 (J)  
8 Round LTC: 1.80 (J)  
Buttress: 1.60 (J)  
Premium: 1.50 (J)  
Body yield: 1.50 (B)

Non-directional string.

Tension is based on buoyed weight.  
Neutral point: 7,789 ft

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Internal Capacity (ft³)
1	9000	4.5	11.60	N-80	LT&C	9000	9000	3.875	208.6
Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (Kips)	Tension Strength (Kips)	Tension Design Factor
1	4208	6350	1.509	4208	7780	1.85	90	223	2.47 J

Prepared by: Clinton Dworshak  
Utah Div. of Oil & Mining

Phone: 801-538-5280  
FAX: 810-359-3940

Date: January 18, 2006  
Salt Lake City, Utah

**Remarks:**

Collapse is based on a vertical depth of 9000 ft, a mud weight of 9 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

*Engineering responsibility for use of this design will be that of the purchaser.*

November 21, 2005

RE: The Houston Exploration Company  
Northwest Horseshoe 8-32-6-23  
Sec. 32, T6S, R23E

Utah Division of Oil, Gas and Mining  
1549 West North Temple  
Suite 1210  
PO BOX 145801  
SLC, UT 84114

Dear Sir or Madam,

The Houston Exploration Company respectfully requests a spacing exception for the subject well. The well has been moved from the center of the forty-acre spacing.

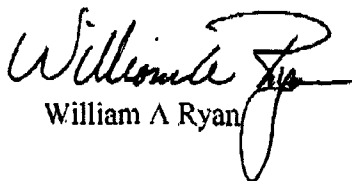
The well is located at 1390' FNL & 464' FEL, which has changed from the proposed location at 1980' FNL & 660' FEL.

The location was moved due to topographic considerations, a drainage and access. Please see the plat maps.

The Houston Exploration Company is the only lease owner within a 460' radius.

If you have additional questions please contact William A Ryan, Agent  
290 S 800 E  
Vernal, UT 84078  
435-789-0968

Sincerely,

  
William A Ryan

RECEIVED  
RECEIVED  
NOV 18 2005  
NOV 21 2005  
DIV. OF OIL, GAS & MINING  
DIV. OF OIL, GAS & MINING  
DIV. OF OIL, GAS & MINING

NOV 21 2005

**From:** Ed Bonner  
**To:** Whitney, Diana  
**Date:** 12/20/2005 9:54:05 AM  
**Subject:** Well Clearance

The following wells have been given cultural resource clearance by the Trust Lands Cultural Resources Group:

Enduring Resources, LLC

Big Pack 12-21-11-2  
Big Pack 12-21-13-2  
Big Pack 12-21-24-2

EOG Resources, Inc  
Chapita Wells Unit 695-32

The Houston Exploration Company

North Walker Hollow 2-32-6-23  
North Walker Hollow 8-32-6-23  
North Walker Hollow 10-32-6-23  
North Walker Hollow 12-32-6-23  
North Walker Hollow 16-32-6-23  
North Horseshoe 12-7-6-22  
North Horseshoe 16-9-6-22  
North Horseshoe 14-10-6-22  
North Horseshoe 2-15-6-22  
North Horseshoe 4-15-6-22

Westport Oil & Gas Company

NBU 1022-20N  
NBU 1022-20L  
NBU 1022-20F  
NBU 1022-20D

If you have any questions regarding this matter please give me a call.

**CC:** Garrison, LaVonne; Hill, Brad; Hunt, Gil

## Clinton Dworshak - cement sks changes

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**From:** eric bowedn <starman686@yahoo.com>  
**To:** <clintondworshak@utah.gov>  
**Date:** 1/18/2006 1:39 PM  
**Subject:** cement sks changes

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here are the cement sks changes that you requested.

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Yahoo! Photos – Showcase holiday pictures in hardcover  
Photo Books. You design it and we'll bind it!

# THE HOUSTON EXPLORATION COMPANY

WELL NAME	API	LEAD	TAIL
		sks	sks
NH 9-16-6-21	43-047-37439	415	514
NH 3-16-6-21	43-047-37391	415	514
NH 13-16-6-21	43-047-37575	415	514
NH 15-2-6-21	43-047-37477	415	514
NH 13-2-6-21	43-047-37476	415	514
NH 11-16-6-21	43-047-37441	499	515
NH 7-16-6-21	43-047-37438	499	515
NH 1-16-6-21	43-047-37442	499	515
NH 15-16-6-21	43-047-37440	499	515
NH 12-7-6-22	43-047-37392	415	515
NH 16-9-6-22	43-047-37393	415	515
NH 14-10-6-22	43-047-37394	415	515
NH 4-15-6-22	43-047-37396	415	515
NH 2-15-6-22	43-047-37395	415	515
NWH 13-36-6-23	43-047-37463	357	526
NWH 15-36-6-23	43-047-37464	357	526
NWH 11-36-6-23	43-047-37462	357	526
NWH 14-32-6-23	43-047-37478	357	526
NWH 2-32-6-23	43-047-37399	357	526
NWH 8-32-6-23	43-047-37401	357	526
NWH 10-32-6-23	43-047-37400	357	526
NWH 12-32-6-23	43-047-37397	357	526
NWH 16-32-6-23	43-047-37398	357	526
G 2-2-6-19	43-047-37561	153	1,050
G 16-2-6-19	43-047-37562	153	1,050
G 1-2-6-19	43-047-37563	153	1,050
G 3-2-6-19	43-047-37568	153	1,050





**State of Utah**

**Department of  
Natural Resources**

MICHAEL R. STYLER  
*Executive Director*

**Division of  
Oil, Gas & Mining**

JOHN R. BAZA  
*Division Director*

JON M. HUNTSMAN, JR.  
*Governor*

GARY R. HERBERT  
*Lieutenant Governor*

January 23, 2006

Houston Exploration Company  
1100 Louisiana, Suite 2000  
Houston, TX 77002

Re: North Walker Hollow 8-32-6-23 Well, 1390' FNL, 464' FEL, SE NE, Sec. 32,  
T. 6 South, R. 23 East, Uintah County, Utah

Gentlemen:

Pursuant to the provisions and requirements of Utah Code Ann. § 40-6-1 *et seq.*, Utah Administrative Code R649-3-1 *et seq.*, and the attached Conditions of Approval, approval to drill the referenced well is granted.

Appropriate information has been submitted to DOGM and administrative approval of the requested exception location is hereby granted.

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date. The API identification number assigned to this well is 43-047-37401.

Sincerely,

A handwritten signature in black ink, appearing to read "Gil Hunt".

Gil Hunt  
Associate Director

pab  
Enclosures

cc: Uintah County Assessor  
SITLA

Operator: Houston Exploration Company  
Well Name & Number North Walker Hollow 8-32-6-23  
API Number: 43-047-37401  
Lease: ML-47777

Location: SE NE                      Sec. 32                      T. 6 South                      R. 23 East

### Conditions of Approval

1. **General**

Compliance with the requirements of Utah Admin. R. 649-1 *et seq.*, the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for Permit to Drill.

2. **Notification Requirements**

The operator is required to notify the Division of Oil, Gas and Mining of the following actions during drilling of this well:

- 24 hours prior to cementing or testing casing
- 24 hours prior to testing blowout prevention equipment
- 24 hours prior to spudding the well
- within 24 hours of any emergency changes made to the approved drilling program
- prior to commencing operations to plug and abandon the well

The following are Division of Oil, Gas and Mining contacts and their work telephone numbers (please leave a voice mail message if the person is not available to take the call):

- Dan Jarvis at (801) 538-5338
- Carol Daniels at (801) 538-5284 (spud)

3. **Reporting Requirements**

All required reports, forms and submittals will be promptly filed with the Division, including but not limited to the Entity Action Form (Form 6), Report of Water Encountered During Drilling (Form 7), Weekly Progress Reports for drilling and completion operations, and Sundry Notices and Reports on Wells requesting approval of change of plans or other operational actions.

4. Compliance with the State of Utah Antiquities Act forbids disturbance of archeological, historical, or paleontological remains. Should archeological, historical or paleontological remains be encountered during your operations, you are required to immediately suspend all operations and immediately inform the Trust Lands Administration and the Division of State History of the discovery of such remains.

5. Compliance with the Conditions of Approval/Application for Permit to Drill outlined in the Statement of Basis. (Copy Attached)

6. This proposed well is located in an area for which drilling units (well spacing patterns) have not been established through an order of the Board of Oil, Gas and Mining (the "Board"). In order to avoid the possibility of waste or injury to correlative rights, the operator is requested, once the well has been drilled, completed, and has produced, to analyze geological and engineering data generated therefrom, as well as any similar data from surrounding areas if available. As soon as is practicable after completion of its analysis, and if the analysis suggests an area larger than the quarter-quarter section upon which the well is located is being drained, the operator is requested to seek an appropriate order from the Board establishing drilling and spacing units in conformance with such analysis by filing a Request for Agency Action with the Board.



**State of Utah**

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Natural Resources**

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*Executive Director*

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JON M. HUNTSMAN, JR.  
*Governor*

GARY R. HERBERT  
*Lieutenant Governor*

February 26, 2007

Ginger Stringham  
The Houston Exploration Co.  
1100 Louisiana, Suite 2000  
Houston, TX 77002-6800

Re: APD Rescinded -N Walker Hollow 8-32-6-23 Sec. 32 T. 6 R. 23E  
Uintah County, Utah API No. 43-047-37401

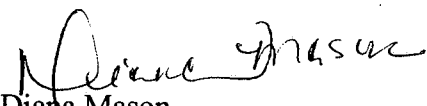
Ms. Stringham:

The Application for Permit to Drill (APD) for the subject well was approved by the Division of Oil, Gas and Mining (Division) on January 23, 2006. No drilling activity at this location has been reported to the division. Therefore, approval to drill the well is hereby rescinded, effective February 26, 2007.

A new APD must be filed with this office for approval prior to the commencement of any future work on the subject location.

If any previously unreported operations have been performed on this well location, it is imperative that you notify the Division immediately.

Sincerely,

  
Diana Mason  
Environmental Scientist

cc: Well File  
SITLA, Ed Bonner

**Division of Oil, Gas and Mining**  
**OPERATOR CHANGE WORKSHEET**

**ROUTING**

1. DJJ

2. CDW

Change of Operator (Well Sold)

**X - Operator Merger**

The operator of the well(s) listed below has changed, effective:

**6/1/2007**

**FROM: (Old Operator):**

N2525 - The Houston Exploration Company  
 1100 Louisiana, Suite 2000  
 Houston, TX 77002

**TO: ( New Operator):**

N6965-Forest Oil Corporation  
 707 17th St, Suite 3600  
 Denver, CO 80202

Phone: 1-(713) 830-6800

Phone: 1 (303) 812-1755

**CA No.**

**Unit:**

WELL NAME	SEC	TWN	RNG	API NO	ENTITY NO	LEASE TYPE	WELL TYPE	WELL STATUS
SEE ATTACHED LIST								

**OPERATOR CHANGES DOCUMENTATION**

Enter date after each listed item is completed

- (R649-8-10) Sundry or legal documentation was received from the **FORMER** operator on: 7/30/2007
- (R649-8-10) Sundry or legal documentation was received from the **NEW** operator on: 7/30/2007
- The new company was checked on the **Department of Commerce, Division of Corporations Database** on: 7/31/2007
- a. Is the new operator registered in the State of Utah: Business Number: 571171-0143
- b. If **NO**, the operator was contacted on: \_\_\_\_\_
- a. (R649-9-2) Waste Management Plan has been received on: IN PLACE
- b. Inspections of LA PA state/fee well sites complete on: \_\_\_\_\_
- c. Reports current for Production/Disposition & Sundries on: YES
- Federal and Indian Lease Wells:** The BLM and or the BIA has approved the merger, name change, or operator change for all wells listed on Federal or Indian leases on: BLM not yet BIA
- Federal and Indian Units:**  
 The BLM or BIA has approved the successor of unit operator for wells listed on: n/a
- Federal and Indian Communization Agreements ("CA"):**  
 The BLM or BIA has approved the operator for all wells listed within a CA on: n/a
- Underground Injection Control ("UIC")** The Division has approved UIC Form 5, **Transfer of Authority to Inject**, for the enhanced/secondary recovery unit/project for the water disposal well(s) listed on: n/a

**DATA ENTRY:**

- Changes entered in the **Oil and Gas Database** on: 7/31/2007
- Changes have been entered on the **Monthly Operator Change Spread Sheet** on: 7/31/2007
- Bond information entered in RBDMS on: 7/31/2007
- Fee/State wells attached to bond in RBDMS on: 7/31/2007
- Injection Projects to new operator in RBDMS on: n/a
- Receipt of Acceptance of Drilling Procedures for APD/New on: pending

**BOND VERIFICATION:**

- Federal well(s) covered by Bond Number: 6236351
- Indian well(s) covered by Bond Number: n/a
- a. (R649-3-1) The **NEW** operator of any fee well(s) listed covered by Bond Number 6218963
- b. The **FORMER** operator has requested a release of liability from their bond on: not yet

**LEASE INTEREST OWNER NOTIFICATION:**

- (R649-2-10) The **FORMER** operator of the fee wells has been contacted and informed by a letter from the Division of their responsibility to notify all interest owners of this change on: 8/1/2007

**COMMENTS:**

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

FORM 9

5. LEASE DESIGNATION AND SERIAL NUMBER:

See Attached List

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT or CA AGREEMENT NAME:

8. WELL NAME and NUMBER:

See Attached List

9. API NUMBER:

various

10. FIELD AND POOL, OR WILDCAT:

**SUNDRY NOTICES AND REPORTS ON WELLS**

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

1. TYPE OF WELL

OIL WELL ☐

GAS WELL ☐

OTHER \_\_\_\_\_

2. NAME OF OPERATOR:

Forest Oil Corporation

3. ADDRESS OF OPERATOR:

707 17th Street, #3600

CITY

Denver,

STATE

CO

ZIP

80202

PHONE NUMBER

(303) 812-1755

4. LOCATION OF WELL

FOOTAGES AT SURFACE: See attached list

COUNTY:

QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:

STATE:

UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT (Submit in Duplicate) Approximate date work will start: _____	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> TEMPORARILY ABANDON
	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLARE
<input checked="" type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only) Date of work completion: _____	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> PRODUCTION (START/RESUME)	<input type="checkbox"/> WATER SHUT-OFF
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input checked="" type="checkbox"/> OTHER: <u>Change of Operator</u>
	<input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

N2525


Effective 6/1/2007 please change the operator for the attached list of Utah wells from The Houston Exploration Company N-2525 to Forest Oil Corporation (N-6965). Forest merged with The Houston Exploration Company, a copy of the merger document is attached.. The contract operated wells will continue to be contract operated by Enduring.

Forest Oil Corporation as new operator, accepts all applicable terms, conditions, stipulations and restrictions concerning approved operations conducted on the lease or portion of the lease described.

Forest Oil Corporation meets the State of Utah bonding requirements under Safeco bond #6218963.

Please send all future correspondence to Forest Oil Corporation at the above listed address.

Forest Oil Corporation, 707 17th Street, Suite #3600, Denver, CO 80202

  
J. C. Ridens, Senior Vice President - Western Region

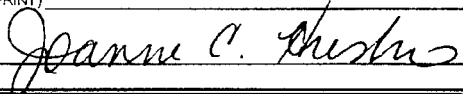
7-5-07

Date

NAME (PLEASE PRINT) Joanne C. Hresko

TITLE Vice President & General Mgr. - Northern Division

SIGNATURE




DATE

7-5-07

(This space for State use only)

APPROVED 7/13/07



(5/2000)

Division of Oil, Gas and Mining  
Earlene Russell, Engineering Technician

(See Instructions on Reverse Side)

No wells in APD status or  
at New status  
at this time

RECEIVED

JUL 30 2007

DIV OF OIL, GAS & MINING

wmp

well_name	sec	tpw	rng	api	entity	lease	well	stat	flag	unit	qtr_qtr	l_num	op no
FEDERAL 28-01	28	080S	250E	4304730098	10095	Federal	GW	S			SESE	UTU-016257	N2525
CONOCO STATE 32-2	32	080S	250E	4304730100	10096	State	GW	S			NENE	ML-11124	N2525
ROCK HOUSE 11-31	31	100S	230E	4304733312	13984	Federal	GW	P			NESW	UTU-76281	N2525
BONANZA 4B-12	12	090S	230E	4304733806	14593	Federal	D	PA			NWNW	UTU-74426	N2525
WALKER HOLLOW 13-31	31	060S	230E	4304735039		Federal	GW	LA			SESW	UTU-76280	N2525
ROCK HOUSE 6D-32	32	100S	230E	4304735409	14293	State	GW	S			SESW	ML-47063	N2525
BONANZA 2B-16	16	090S	240E	4304735694	14186	State	D	PA			NWNE	ML-46526	N2525
ROCK HOUSE 2D-36	36	100S	220E	4304735759	14357	State	GW	P			NWNE	ML-47061	N2525
ROCK HOUSE 2D-32	32	100S	230E	4304735760	14317	State	GW	S			NWNE	ML-47063	N2525
ROCK HOUSE 10D-32	32	100S	230E	4304735761	14318	State	GW	S			NWSE	ML-47063	N2525
ROCK HOUSE 12D-32	32	100S	230E	4304735762	14294	State	GW	P			NWSW	ML-47063	N2525
ROCK HOUSE 11-36	36	100S	220E	4304735900	14478	State	GW	P			NESW	ML-46907	N2525
ROCK HOUSE 4-36	36	100S	220E	4304735901	14449	State	GW	S			NWNW	ML42061	N2525
BONANZA 12A-22	22	090S	240E	4304735922	14520	Federal	D	PA			NWSW	UTU-78118	N2525
BONANZA 14-16	16	090S	240E	4304735941	14521	State	D	PA			SESW	ML-46526	N2525
ROCK HOUSE 11-2	02	110S	230E	4304736153	14695	State	GW	P	C		NESW	ML-47078	N2525
ROCK HOUSE 7-32-10-23	32	100S	230E	4304736306	14766	State	GW	S			SWNE	ML-47063	N2525
ROCK HOUSE 3-32-10-23	32	100S	230E	4304736307	14781	State	GW	P			NENW	ML-47063	N2525
ROCK HOUSE 5-32-10-23	32	100S	230E	4304736410	14727	State	GW	S			SWNW	ML-47063	N2525
GUSHER 6-2	02	060S	190E	4304736963		State	OW	LA			SESW	ML-49144	N2525
N HORSESHOE 3-16-6-21	16	060S	210E	4304737391	15716	State	GW	DRL	C		NENW	ML-49317	N2525
N HORSESHOE 12-7-6-22	07	060S	220E	4304737392		State	GW	LA			NWSW	ML-47969	N2525
N HORSESHOE 16-9-6-22	09	060S	220E	4304737393		State	GW	LA			SESE	ML-47969	N2525
N HORSESHOE 14-10-6-22	10	060S	220E	4304737394		State	GW	LA			SESW	ML-47969	N2525
N HORSESHOE 2-15-6-22	15	060S	220E	4304737395		State	GW	LA			NWNE	ML-47969	N2525
N HORSESHOE 4-15-6-22	15	060S	220E	4304737396		State	GW	LA			NWNW	ML-47969	N2525
N WALKER HOLLOW 12-32-6-23	32	060S	230E	4304737397		State	GW	LA			NWSW	ML-47777	N2525
N WALKER HOLLOW 16-32-6-23	32	060S	230E	4304737398		State	GW	LA			SESE	ML-47777	N2525
N WALKER HOLLOW 2-32-6-23	32	060S	230E	4304737399	15741	State	GW	DRL	C		NWNE	ML-47777	N2525
N WALKER HOLLOW 10-32-6-23	32	060S	230E	4304737400		State	GW	LA			NWSE	ML-47777	N2525
N WALKER HOLLOW 8-32-6-23	32	060S	230E	4304737401		State	GW	LA			SENE	ML-47777	N2525
N WALKER HOLLOW 11-36-6-23	36	060S	230E	4304737462		State	GW	LA			NESW	ML-47970	N2525
N WALKER HOLLOW 13-36-6-23	36	060S	230E	4304737463		State	GW	LA			SWSW	ML-47970	N2525
N WALKER HOLLOW 15-36-6-23	36	060S	230E	4304737464		State	GW	LA			SWSE	ML-47970	N2525
N WALKER HOLLOW 14-32-6-23	32	060S	230E	4304737478		State	GW	LA			SESW	ML-47777	N2525
HACKING RES 11-32-8-25	32	080S	250E	4304737479		State	GW	LA			NESW	ML-11124	N2525
HACKING RES 3-32-8-25	32	080S	250E	4304737480		State	GW	LA			NENW	ML-11124	N2525
HACKING RES 5-32-8-25	32	080S	250E	4304737481		State	GW	LA			SWNW	ML-11124	N2525
HACKING RES 15-32-8-25	32	080S	250E	4304737482		State	GW	LA			SWSE	ML-11124	N2525
HACKING RES 9-32-8-25	32	080S	250E	4304737483		State	GW	LA			NESE	ML-11124	N2525
HACKING RESERVOIR 7-32-8-25	32	080S	250E	4304737571	15885	State	GW	DRL	C		SWNE	ML-11124	N2525